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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,158	03/27/2001	Andrew L. Norrell	PA1690	2663

7590 07/08/2003

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EXAMINER	
SWERDLOW, DANIEL	
ART UNIT	**PAPER NUMBER**
2644	12

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/819,158	Applicant(s) NORRELL ET AL.	
	Examiner Daniel Swerdlow	Art Unit 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 05 May 2003 .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-25 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-25 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5 May 2003 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 6 through 8, 10, 23 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Drew (US Patent 6,546,100).

4. Claim 6 claims a load coil for insertion along a local loop. Drew discloses a load coil for a two-conductor transmission line that corresponds to the local loop claimed (column 1, lines 31-37). Claim 6 further claims the load coil comprises a coupled inductor having first and second windings wrapped around an inductor core, each winding having an input and an output. Drew discloses a coupled inductor having first and second windings wrapped around an inductor core,

each winding having an input and an output (Fig. 4, reference 42, 44; column 2, line 62 through column 3, line 2). Claim 6 further claims the inductor is configured to improve transmission of POTS-based signals across the local loop. Drew discloses providing a relatively flat frequency response (i.e., improving transmission) in the VF band (i.e., for POTS-based signals) (column 1, lines 42-43). Claim 6 further claims a first capacitive element in parallel with the first winding. Drew discloses a capacitor (Fig. 4, reference 46; column 3, lines 2-3) connected in parallel across the first winding. Claim 6 further claims a second capacitive element in parallel with the second winding. Drew discloses a capacitor (Fig. 4, reference 48; column 3, lines 3-5) connected in parallel across the second winding. Claim 6 further claims the capacitive elements have capacitance values relative to an intra-winding capacitance value of either the first or second winding to permit passage of DSL signals across the load coil. Drew discloses the capacitors that correspond to the capacitive elements claimed having capacitance values of 50 nF to 100 nF (column 3, lines 12-15) and a parasitic winding capacitance (Fig. 4, reference C'w; column 3, lines 5-12) that corresponds to the intra-winding capacitance claimed having a value of 288 pF (0.288 nF) (column 2, lines 26-28). As such, Drew discloses capacitance values for the capacitive elements 173 to 346 times the value of the intra-winding capacitance. Further, Drew discloses that these capacitance values allow the capacitors to provide a low impedance path for high frequency signals to bypass the windings (i.e., permit passage of DSL signals across the load coil) (column 3, lines 18-20). Therefore, Drew anticipates all elements of Claim 6.

5. Claim 7 claims the load coil of Claim 6 wherein the capacitive elements have a capacitance in the range of 5 nF to 50 nF. As stated above apropos of Claim 6, Drew anticipates all elements of that claim. In addition, as stated above apropos of Claim 6, Drew discloses

capacitors that correspond to the capacitive elements claimed having a capacitance of 50 nF to 100 nF. Therefore, Drew anticipates all elements of Claim 7.

6. Claim 8 claims the load coil of Claim 6 wherein the capacitive elements have a capacitance in the range of 10 nF to 82 nF. As stated above apropos of Claim 6, Drew anticipates all elements of that claim. In addition, as stated above apropos of Claim 6, Drew discloses capacitors that correspond to the capacitive elements claimed having a capacitance of 50 nF to 100 nF. Therefore, Drew anticipates all elements of Claim 8.

7. Claim 10 claims the load coil of Claim 6 wherein the first and second windings each have an intra-winding capacitance value. As stated above apropos of Claim 6, Drew anticipates all elements of that claim. In addition, As stated above apropos of Claim 6, Drew discloses a parasitic winding capacitance (Fig. 4, reference C'w; column 3, lines 5-12) that corresponds to the intra-winding capacitance claimed having a value of 288 pF (0.288 nF). Claim 10 further claims the first and second capacitance values increase the effective intra-winding capacitance by at least a factor of 120. Drew discloses capacitors that correspond to the capacitive elements claimed having capacitance values of 50 nF to 100 nF. As such, adding the capacitors across the windings, as disclosed by Drew, increases the effective value of the intra-winding capacitance by a factor of at least 173. Therefore, Drew anticipates all elements of Claim 10.

8. Claim 23 is essentially similar to Claim 6. Claim 23 is rejected for the reasons stated above apropos of Claim 6.

9. Claim 25 claims the load coil of Claim 6 wherein the capacitive elements have a capacitance value at least 120 times the intra-winding capacitance value. As stated above apropos of Claim 6, Drew anticipates all elements of that claim. In addition, As stated above

apropos of Claim 6, Drew discloses a parasitic winding capacitance that corresponds to the intra-winding capacitance claimed having a value of 288 pF (0.288 nF) and capacitors that correspond to the capacitive elements claimed having capacitance values of 50 nF to 100 nF, at least 173 times the parasitic winding capacitance value. Therefore, Drew anticipates all elements of Claim 25.

10. Claims 18 through 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Tambe et al. (US Patent Application Publication 2002/0113649 A1).

11. Claim 18 claims a method for improving simultaneous transmission of POTS-band and DSL signals across a local loop, comprising the steps of: inductively coupling a first segment of the local loop to a second segment of the local loop to condition the POTS-band signals traversing the local loop; and capacitively coupling a first segment of the local loop to a second segment of the local loop to pass the DSL signals traversing the local loop with low attenuation. Tambe discloses a modified load coil (Fig. 6, reference 600) that inductively (Fig. 6, reference 621, 622; paragraph 0059) couples a first segment of the local loop (Fig. 6, reference 610 CO side) to a second segment of the local loop (Fig. 6, reference 610 CPE Side) via a coupled inductor (paragraph 0063) and capacitively couples a first segment of the local loop to a second segment of the local loop (Fig. 6, reference 641, 642). Claim 18 further claims the capacitance values of the capacitive elements are selected based upon a capacitance value of the coupled inductor. Tambe discloses selecting capacitance by collecting frequency response data for the modified load coil by sweeping the value of the capacitance across a range. Because the capacitance of the coupled inductor is included in the modified load coil during this procedure,

its capacitance influences the result, and the capacitance of the capacitors is inherently based on the capacitance of the coupled inductor. Therefore, Tambe anticipates all elements of Claim 18.

12. Claim 19 claims the method of Claim 18 wherein the step of inductively coupling includes coupling a first wire of the first segment of the local loop to a first wire of the second segment of the local loop via a first inductor winding and coupling a second wire of the first segment of the local loop to a second wire of the second segment of the local loop via a second inductor winding. As stated above apropos of Claim 18, Tambe anticipates all elements of that claim. In addition, Tambe discloses coupling a first wire of the first segment of the local loop (Fig. 6, reference 610 CO Side upper wire) to a first wire of the second segment of the local loop (Fig. 6, reference 610 CPE Side upper wire) via a first inductor winding (Fig. 6, reference 621) and coupling a second wire of the first segment of the local loop (Fig. 6, reference 610 CO Side lower wire) to a second wire of the second segment of the local loop (Fig. 6, reference 610 CPE Side lower wire) via a second inductor winding (Fig. 6, reference 622). Therefore, Tambe anticipates all elements of Claim 19.

13. Claim 20 claims the method of Claim 18 wherein the step of capacitively coupling includes coupling a first wire of the first segment of the local loop to a second wire of the second segment of the local loop via a first capacitive element and coupling a second wire of the first segment of the local loop to a first wire of the second segment of the local loop via a second capacitive element. As stated above apropos of Claim 18, Tambe anticipates all elements of that claim. In addition, Tambe discloses coupling a first wire of the first segment of the local loop (Fig. 6, reference 610 CO Side upper wire) to a second wire of the second segment of the local loop (Fig. 6, reference 610 CPE Side upper wire) via a first capacitive element (Fig. 6, reference

641) and coupling a second wire of the first segment of the local loop (Fig. 6, reference 610 CO Side lower wire) to a first wire of the second segment of the local loop (Fig. 6, reference 610 CPE Side lower wire) via a second capacitive element (Fig. 6, reference 642). Therefore, Tambe anticipates all elements of Claim 20.

14. Claim 21 claims the method of Claim 18 wherein the step of capacitively coupling includes coupling a first wire of the first segment of the local loop to a first wire of the second segment of the local loop via a first capacitive element and coupling a second wire of the first segment of the local loop to a second wire of the second segment of the local loop via a second capacitive element. As stated above apropos of Claim 18, Tambe anticipates all elements of that claim. In addition, Tambe discloses coupling a first wire of the first segment of the local loop (Fig. 6, reference 610 CO Side upper wire) to a first wire of the second segment of the local loop (Fig. 6, reference 610 CPE Side upper wire) via a first capacitive element (Fig. 6, reference 641) and coupling a second wire of the first segment of the local loop (Fig. 6, reference 610 CO Side lower wire) to a second wire of the second segment of the local loop (Fig. 6, reference 610 CPE Side lower wire) via a second capacitive element (Fig. 6, reference 642). Therefore, Tambe anticipates all elements of Claim 21.

Claim Rejections - 35 USC § 103

15. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

16. Claims 1, 2, 3, 5, 16, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quarles (US Patent 1,711,653) in view of Federal Telephone and Radio Corporation (FTRC) (Reference Data for Radio Engineers).

17. Claim 1 claims a load coil comprising a coupled inductor with two windings having an interwinding capacitance value between them wrapped about an inductor core with a first capacitive element between the input of the first winding and the output of the second winding and a second capacitive element between the input of the second winding and the output of the first winding. Quarles discloses a load coil comprising a coupled inductor with two windings that inherently have an interwinding capacitance value between them wrapped about an inductor core with capacitors connected diagonally across the windings (i.e., between the input of the first winding and the output of the second winding; and between the input of the second winding and the output of the first winding) (Fig. 1 and page 1, lines 99-102). Claim 1 further claims each have capacitance values at least four times the inter-winding capacitance value. Quarles specifies the value of the capacitors as being half of the value to be used between the middle points of the loading coils (page 4, lines 58-64) which is specified to be between .4 and .8 of the total between the wires of one section of the loop. Quarles therefore teaches a value of the capacitors between .2 and .4 of the capacitance of a loop section. Federal Telephone and Radio Corporation teaches that the capacitance of a mile of 24 AWG telephone transmission line is .075 μF (page 111). A 6,000 foot loop section, therefore, has a capacitance of .075(6000/5280) μF which is equal to .085 μF or 85 nF. Hence, the values Quarles teaches are between .2(85)nF and .4(85) nF, that is, between 17 nF and 34 nF. It would have been obvious to one skilled in the art at the time of the invention to utilize the published values for transmission line capacitance to

calculate the capacitances taught by Quarles for the purpose of implementing Quarles's invention. The inter-winding capacitance of a load coil is 1,150 pF (see US Patent 6,546,100 to Drew, column 2, lines 32-33), which equals 1.15 nF. As such, the load coil made obvious by the combination of Quarles and FTRC has capacitance values that are at least 14.8 times the inter-winding capacitance value. Therefore, the combination makes obvious all elements of Claim 1. Claim 1 contains language indicating the inductor is configured to counteract capacitance across the loop to improve transmission of POTS-based signals and that the capacitive elements are configured to permit passage of DSL signals. A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). Because the load coil made obvious by the combination of Quarles and FTRC is structurally identical to the load coil of Claim 1, the recitation related to use carries no weight.

18. Claim 2 claims the load coil of Claim 1 wherein the capacitive elements have a capacitance in the range of 10 nF to 82 nF. As stated above apropos of Claim 1, the combination of Quarles and FTRC makes obvious all elements of that claim. In addition; as stated above apropos of Claim 1, the combination makes obvious capacitive elements having a capacitance of 17 nF to 34 nF. Therefore, the combination makes obvious all elements of Claim 2.

19. Claim 3 claims the load coil of Claim 1 wherein the capacitive elements have a capacitance in the range of 5 nF to 50 nF. As stated above apropos of Claim 1, the combination of Quarles and FTRC makes obvious all elements of that claim. In addition, as stated above

apropos of Claim 1, the combination makes obvious capacitive elements having a capacitance of 17 nF to 34 nF. Therefore, the combination makes obvious all elements of Claim 3.

20. Claim 5 claims the load coil of Claim 1 wherein the capacitive elements increase the effective interwinding capacitance of the inductor windings by at least a factor of 5. As stated above apropos of Claim 1, the combination of Quarles and FTRC makes obvious all elements of that claim. In addition, as stated above apropos of Claim 1, the combination of Quarles and Federal Telephone and Radio Corporation makes obvious capacitance values between 17 nF and 34 nF. Applicant discloses that capacitances in the range of 5 nF to 50 nF increase the effective interwinding capacitance by a factor of five to ten (page 13, lines 15-18). Therefore, it is inherent in the values taught by Quarles and FTRC that they increase the effective interwinding capacitance of the inductor windings by at least a factor of 5.

21. All elements of Claim 16 are comprehended by Claim 1. Claim 16 is rejected for the reasons stated above apropos of Claim 1.

22. Claim 22 is essentially similar to Claim 1. Claim 22 is rejected for the reasons stated above apropos of Claim 1.

23. Claim 24 claims the load coil of Claim 1 wherein the capacitive elements have a capacitance value at least five times the interwinding capacitance value. As stated above apropos of Claim 1, the combination of Quarles and FTRC makes obvious all elements of that claim. In addition, as stated above apropos of Claim 1, the load coil made obvious by the combination of Quarles and FTRC has capacitance values that are at least 14.8 times the inter-winding capacitance value. Therefore, the combination makes obvious all elements of Claim 24.

24. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Quarles in view of FTRC and further in view of Pinel (US Patent 3,848,098). Claim 4 claims the load coil of Claim 1 wherein the coupled inductor has an inductance of about 66 mH. As stated above apropos of Claim 1, Quarles discloses all relevant elements of that claim. Therefore, Quarles discloses all relevant elements of Claim 4 with the exception of specification of the inductance value. Pinel discloses that 66 mH is a typical value for inductors used as loading coils on analog telephone lines (column 3, lines 11-14). It would have been obvious to one skilled in the art at the time of the invention to use a load coil with a typical inductance value in the system disclosed by Quarles for the purpose of having a loading coil easily obtainable in forms suitable for use in outside plant telephone installations.

25. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drew in view of Pinel. Claim 9 claims the load coil of Claim 6 wherein the coupled inductor has an inductance of about 66 mH. As stated above apropos of Claim 6, Drew anticipates all elements of that claim. Therefore, Drew anticipates all elements of Claim 6 with the exception of an inductance value of about 66 mH. Pinel discloses that 66 mH is a typical value for inductors used as loading coils on analog telephone lines (column 3, lines 11-14). It would have been obvious to one skilled in the art at the time of the invention to use a load coil with a typical inductance value in the load coil disclosed by Drew for the purpose of having a loading coil easily obtainable in forms suitable for use in outside plant telephone installations.

26. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quarles in view of FTRC and further in view of Shenoi et al. (US Patent 6,507,606).

27. All elements of Claim 11 are comprehended by Claim 1 with the exception that Claim 11 claims a DSL signal repeater for disposal along the local loop to amplify the DSL signals, the repeater including a load coil for conditioning POTS signals. As stated above apropos of Claim 1, the combination of Quarles and FTRC makes obvious all elements of that claim. Therefore, the combination makes obvious all elements of Claim 11 with the exception of a DSL signal repeater for disposal along the local loop to amplify the DSL signals, the repeater including a load coil for conditioning POTS signals. Shenoi discloses a DSL repeater (Fig. 4, reference 400; column 7, lines 54-55) that includes load coils (column 7, lines 59-63). It would have been obvious to one skilled in the art at the time of the invention to combine the repeater taught by Shenoi with the combination made obvious by Quarles and FTRC for the purpose of providing DSL over long loaded loops.

28. Claim 12 claims the system of Claim 11 wherein the coupled inductor has first and seconds windings with capacitive elements disposed diagonally across those windings. As stated above apropos of Claim 11, the combination of Quarles and FTRC makes obvious all elements of that claim. In addition, Quarles discloses diagonal disposal of capacitors in a loading coil. Therefore the combination makes obvious all elements of Claim 12.

29. Claims 11, 13 through 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drew in view of Shenoi.

30. All elements of Claim 11 are comprehended by Claim 6 with the exception that Claim 11 claims a DSL signal repeater for disposal along the local loop to amplify the DSL signals, the repeater including a load coil for conditioning POTS signals. As stated above apropos of Claim 6, Drew anticipates all elements of that claim. Therefore, Drew anticipates all elements of Claim 11 with the exception of a DSL signal repeater for disposal along the local loop to amplify the DSL signals, the repeater including a load coil for conditioning POTS signals. Shenoi discloses a DSL repeater (Fig. 4, reference 400; column 7, lines 54-55) that includes load coils (column 7, lines 59-63). It would have been obvious to one skilled in the art at the time of the invention to combine the repeater taught by Shenoi with the load coil taught by Drew for the purpose of providing DSL over long loaded loops.

31. Claim 13 claims the system of Claim 11 with first and second windings and capacitive elements disposed in parallel with those windings. As stated above apropos of Claim 11, the combination of Drew and Shenoi makes obvious all elements of that claim. In addition, as stated above apropos of Claim 6, Drew discloses capacitive elements disposed in parallel with the windings. Therefore the combination makes obvious all elements of Claim 13.

32: Claim 14 claims the system of Claim 11 wherein the capacitive elements have a capacitance value in the range of 10 nF to 82 nF. As stated above apropos of Claim 11, the combination of Drew and Shenoi makes obvious all elements of that claim. In addition, as stated above apropos of Claim 6, Drew discloses capacitive elements having a capacitance of 50 nF to 100 nF. Therefore, the combination makes obvious all elements of Claim 14.

33. Claim 15 claims the load coil of Claim 11 wherein the capacitive elements have a capacitance in the range of 5 nF to 50 nF. As stated above apropos of Claim 11, the combination

of Drew and Shenoi makes obvious all elements of that claim. In addition, as stated above apropos of Claim 6, Drew discloses capacitive elements having a capacitance of 50 nF to 100 nF. Therefore, the combination makes obvious all elements of Claim 15.

34. All elements of Claim 17 are comprehended by Claim 11. Claim 17 is rejected for the reasons stated above apropos of Claim 11.

Response to Arguments

35. Applicant's arguments with respect to claims 4, 6 through 15, 17 and 23 have been considered but are moot in view of the new ground(s) of rejection.

36. Applicant's arguments filed 5, May 2003 have been fully considered but they are not persuasive.

37. Regarding Claim 1 and claims dependent thereupon and Claims 16 and 22, applicant alleges that Quarles fails suggest capacitance values that are at least four times the inter-winding capacitance value. Examiner respectfully disagrees. Examiner has shown how one skilled in the art in following the disclosure of Quarles would arrive at capacitance values that are at least four times the inter-winding capacitance value. As such, Quarles, in combination with FTRC makes obvious all elements of Claim 1.

38. Applicant alleges that Quarles teaches away from improving the transmission of POTS-based signals. Examiner respectfully disagrees. Quarles states on page 1, lines 3-6, "The object of the invention is to provide a system of loading … which will improve the quality of transmission." Assuming *arguendo* that the system disclosed by incurs some additional

attenuation to achieve this improvement, it still meets the limitation of Claim 1, "to improve the transmission of POTS-based signals across the local loop".

39. The citation of *Ex parte Marsham* apropos of Claim 1 is directed to the limitation "to permit passage of DSL signals across the load coil", which is clearly "a recitation with respect to the manner in which [the] claimed apparatus is intended to be employed."

40. Regarding Claims 18 through 21, applicant alleges that Tambe does not teach selecting capacitance values based on the capacitance value of the coupled inductor. Examiner respectfully disagrees. Tambe discloses selecting capacitance by collecting frequency response data for the modified load coil by sweeping the value of the capacitance across a range. Because the capacitance of the coupled inductor is included in the modified load coil during this procedure, a load coil with a different capacitance would yield a different result for the capacitance value of the capacitive element. Therefore, the capacitance of the capacitors is inherently based on the capacitance of the coupled inductor.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 703-305-4088. The examiner can normally be reached on Monday through Friday between 8:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forrester Isen can be reached on 703-305-4386. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

ds
June 19, 2003

FORESTER W. ISEN
SUPERVISORY PATENT EXAMINER
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